

Review Essay

The 'Two Dogmas of Empiricism' 50 Years On

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The year 2001 marked the 50th anniversary of the publication in the *Philosophical Review* (January 1951) of W. V. Quine's 'Two Dogmas of Empiricism'.¹ Since Quine reprinted the article in *From a Logical Point of View* in 1961 (see Quine, 1953), the editors of this number of the *Grazer Philosophische Studien* saw the year 2003 as 'a good occasion to celebrate fifty years' of 'Two dogmas' (p.1), and collected the ten papers presented at the conference '50 Years of Empiricism without Dogmas' (Berlin, 13–15 September 2001), adding to the volume a paper by Donald Davidson who could not attend because of the events of September 11.

The editors' intention is without doubt a very worthy one. The discussions Quine's article arouse go well beyond criticism of the neoempiricist conception of analyticity to the extent that they deeply affect the destiny of the analytic approach to philosophical questions in the fields of epistemology, philosophy of science and philosophy of language. The editors rightly underline how Quine and Carnap's contrasting views on the analytic-synthetic dichotomy ultimately influenced also the problem of the nature and task of philosophy. Quine's rejection of analyticity put into discussion the 'idea that philosophy is an a priori discipline which differs in principle from the empirical sciences' (p.1). Since this idea has characterized not only early analytic philosophy, but also many aspects of the Kantian tradition, phenomenology and philosophical hermeneutics, one can say that the 'mixing of cards' caused by 'Two Dogmas' affected various lines of thought and a large set of questions. Quine himself developed this rejection of analyticity to the point of questioning the a priori/a posteriori knowledge distinction, the separation between science and philosophy and the traditional criticism of psychologism. Abandoning these dichotomies and views led, in its turn, both Quine and other analytical philosophers to a kind of naturalism in which philosophy is a part of natural science, or at least in line of continuity with it.

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Thus there is more than one reason to welcome this collection with its intention 'to reconsider the semantic, epistemological and methodological questions raised by "Two Dogmas"' (p.3) highlighting Quine's attack 'on analyticity, apriority and necessity' and at the same time evaluating the 'implications of that attack that far transcend the limits of Quine scholarship, and lie at the heart of the current self-understanding of philosophy' (p.3). The editors also deserve recognition for having included essays written by both opponents and proponents of the views attacked by Quine.

The first paper is by Herbert Schnädelbach, 'Two Dogmas of Empiricism. Fifty Years After' (pp.7–12). As well as underlining the important position still occupied today by Quine's essay, Schnädelbach examines Carnap's conception of philosophy as a *logische Analyse der Wissenschaftssprache*, G.E. Moore's paradox of analysis, Quine's criticism of the analytic/synthetic dichotomy, Wittgenstein's conception of philosophy, and Kant's explanation of analytic judgement as *Erläuterungsurteil* in order to support a pragmatic conception of philosophy as the practice of explication and clarification. For Schnädelbach analytic philosophy 'has its identity in the pragmatics of elucidation, and not in some sort of special knowledge incorporated in special philosophical statements' (p.12). This way of doing philosophy still needs the notions of analyticity and synonymy even if 'they cannot be defined in terms of something else' (p.12).

The other ten essays have been grouped into three sections.

1. The first section, entitled *Analyticity Revisited*, includes the works by Paul A. Boghossian, Kathrin Glüer, Verena Mayer, Christian Nimtz and Åsa Maria Wikforss. They introduce in various ways the question of analyticity, either to defend this notion from Quine's attacks, negate it in line with Quine or clarify its various historical interpretations.

In 'Epistemic Analyticity: a Defense' (pp.15–35), Boghossian develops the project that he started in the essay 'Analyticity Reconsidered' (Boghossian, 1996). He intends to salvage a notion of analyticity from Quine's widely accepted critique and explain the a priori via the notion of meaning or concept possession. This project rests on the distinction between a metaphysical and an epistemic version of analyticity. According to the *metaphysical* version, 'a sentence is analytic if it owes its truth entirely to its meaning and without any contribution from the "facts"' (p.15); according to the *epistemic* version, a sentence is 'analytic if grasp of its meaning can suffice for justified belief in the truth of the proposition it expresses' (p.15). Boghossian affirms that Quine 'was deeply right to insist that there are no metaphysical analytic sentences'. He also thinks that Quine's objections to metaphysical analyticity do not relate to epistemic analyticity, and that 'it is possible to provide a model of how some sentences might be epistemically analytic' (p. 16).

In this paper Boghossian better specifies his conception and defends it against some objections raised to previous formulations. In particular, he tries to respond to the objection that 'there can be no epistemically analytic sentences that are not also metaphysically analytic, and that the notion of implicit definition cannot explain a priori entitlement' (p.15). He thus introduces the distinction between an *inferential* and a *constitutive* way in which 'facts about meaning might generate facts about entitlement' (p.15) and concludes his paper by outlining a theory of the constitutive pathway that has led him to modify some of his preceding ideas.

A contrasting view is presented in the paper that immediately follows Boghossian's: 'Analyticity and Implicit Definition' by Kathrin Glüer (pp.37–60). Glüer criticizes Boghossian's analytic theory of a priori knowledge using only arguments independent of the thesis of the indeterminacy of translation presented by Quine in *Word and Object* (1960). Such a strategy was chosen because in the above-quoted 1996 essay on analyticity Boghossian stated that Quine's criticism of analyticity is ineffective as long as it does not depend on the extremely controversial thesis of indeterminacy.

For Glüer, Boghossian underestimates the power of the classical Quinean objections to the analytic/synthetic distinction and the linguistic doctrine of the a priori, in particular to the conventionalistic account of logical truth. By once more taking up the argument around epistemological holism presented in the concluding pages of 'Two Dogmas', she shows how difficult it is to maintain the dichotomy between empirical and non-empirical sentences, and thus the distinction (defended by Boghossian) between meaning-constitutive and non-meaning-constitutive sentences. Moreover, Glüer also refers back to 'Truth by Convention' (Quine, 1935) in order to attack the conventionalistic account of logical truth via the idea of implicit definition. To obtain this she appeals not only to the well-known infinite regress argument, but also to an overlooked objection expounded in this essay, the objection according to which there are no *sentences* such that 'stipulating them to be true would result in the meaning assignment' to the logical constants. In fact, in order to perform this function the sentences used 'would have to be general, that is they would have to contain already interpreted expressions of the very kind they are to implicitly define' (p.55f.).

In developing her criticism, Glüer does not limit herself to rehearsing Quine's arguments. Using an argument criticized by Boghossian in this very volume and linked to an analogous remark by Laurence Bonjour (see p.22), she tries to show that even if implicit definers for the logical constants existed, their epistemic analyticity would be doubtful, since knowing 'their meaning does not provide justification by virtue of meaning alone, for knowledge of meaning itself turns out to already require knowledge of facts about the world' (p.58). Glüer concludes thus: 'the distinction between metaphysical and epistemic analyticity' does not seem to be defensible: 'at least on the Boghossian model, the facts do return, and with a vengeance' (p.58).

Verena Mayer's essay ('Implicit Thoughts: Quine, Frege and Kant on Analytic Propositions', pp. 61–90) brings a change of scenery: the purely theoretical discourse is supplemented by historical elements. Mayer tries to show that the *semantic* conception of analyticity presupposed by Quine, and attributed to Kant, Frege and Carnap, has nothing in common with the one effectively maintained by Kant. Kant actually had a distinctly *pragmatic* conception according to which 'analytic propositions elucidate certain presuppositions of our conceptual scheme, thereby serving the anti-metaphysical project of transcendental philosophy' (p.61). In contrast to what has been suggested by Quine, this conception is not connected to metaphysical essentialism and an essentialist theory of meaning. Instead it concerns the explication of our conceptual apparatus: 'analytic sentences are not true "in virtue of meanings and independently of facts" but in virtue of conceptual relations within our web of beliefs' (p.88).

Mayer's analysis leads to a Wittgensteinian conclusion similar to the one advanced by Schnädelbach: 'Analytic propositions in the sense of Kant do not spell out the literal meaning of their subject terms, but are rather similar to Wittgenstein's grammatical sentences in that they elucidate or describe the use of a concept' (p.88). In Mayer's perspective, freeing Kant's conception from the essentialist vision of meanings presupposed by Carnap and criticized by Quine should not lead 'to stop the analysis of language or concepts, or to blur the analytic/synthetic distinction', but 'to restore' a 'pragmatic notion of analytic judgments' such as the one developed by Kant 'against the methods of bad metaphysics' (p.89).

This conclusion certainly contains valid aspects and can be useful in order to individuate the presence of metaphysical elements in Carnap's philosophy; nevertheless, it does not take sufficiently into consideration the fact – as it emerges especially from the 1950 essay 'Empiricism, Semantics, and Ontology' – that Carnap's reference to conventionalism, semantic rules, meaning postulates and, in general, the idea of linguistic frameworks is the very basis of his refusal of ontology and metaphysical realism.

Christian Nimtz ('Analytic Truths – Still Harmless after All These Years?', pp.91–118) defends Putnam's (1962) thesis of analyticity advanced in 'The Analytic and the Synthetic' (about ten years after 'Two Dogmas'). Nimtz finds Putnam's deflationist thesis essentially correct according to which (*pace* Quine) there are analytic truths, but these analytic truths are *harmless*, since 'they are trivial and hence ill-suited to play any exceptional epistemological or methodological role' (p.91), such as the one assigned to them by Logical Empiricists. Thus Nimtz elaborates a semantic approach to analyticity similar to Putnam's, but without its defects, that he calls 'sophisticated Kripkeanism' (p.100). Nimtz states that this approach can show the harmless nature of analytical truths and rebut the thesis, recently propounded mainly by David Chalmers and Frank Jackson, that 'analytic truths are the means as well as the aim of philosophy' (p.92). Notice that Nimtz is the first to recognize that this approach leaves out mathematical and logical truths and concerns mainly 'purported analyticities' involving terms such as 'crow', 'energy' and the like (p.92).

The last essay of the first section is 'An a posteriori Conception of Analyticity?' (pp.119–139) by Åsa Maria Wikforss. The question here is whether it is possible to use the *de re* conception of necessity resuscitated by S. Kripke in order to free 'analyticity from its epistemic ties' and propose by means of such transformation 'a notion of analyticity that is immune to Quine's attack, and compatible with his epistemic holism' (p.119). With this aim in mind, Wikforss examines Tyler Burge's externalist idea 'that truths of meaning depend on features of the external environment and are a posteriori' and highlights some of the problems arising from both this idea and the attempt to transfer 'Kripke's strategy with respect to necessity' to analyticity (p.121). Wikforss thereby achieves an interesting result: Burge's externalist neo-rationalism 'rests on unusually strong essentialist assumptions' according to which 'not only natural kinds have underlying essences, but almost everything – artefacts, events, natural phenomena that do not constitute natural kinds, etc.' (p.132).

For Wikforss this strengthening of essentialism 'is not an accident. If one rejects analyticity in the positivist sense, and tries to replace it with an a posteriori notion of

analyticity, one needs to endorse a form of generalized Aristotelian essentialism. The essentialism simply replaces conventionalism. We have, as it were, come full circle' (p.132). As a matter of fact the circle is really full because the whole neoempiricist construction, with the distinction between analytic and synthetic and the grouping of the necessary and the a priori with the analytic and the contingent and the a posteriori with the synthetic, played an important role within the project of *Überwindung der Metaphysik durch logische Analyse der Sprache*. Wikforss's conclusion, in any case, ends up favouring Quine's rejection of analyticity: 'To the extent one agrees with Quine and is wary of the traditional, a priori conception of analyticity . . . one is better off giving up analyticity altogether than trying to reconstrue a non-epistemic, a posteriori conception of it' (p.137).

2. The second section, titled *Necessity, Synonymy, and Logic*, includes the papers by Hans-Johann Glock, Peter Pagin and Tyler Burge. H.-J. Glock ('The Linguistic Doctrine Revisited', pp.143–70) explores 'the possibility of rehabilitating' a 'limited version' of the linguistic doctrine of necessary truth supported by both Wittgenstein and the logical empiricists. He starts off from the thesis that there is a distinction between analytical assertions and synthetic assertions, in other words – as it had been maintained in various ways by Arne Naess (1953) in *Interpretation and Preciseness*, and Paul Grice and Peter F. Strawson (1956) in their 'In Defense of a Dogma' – between assertions that provoke reactions of *disbelief*, or *belief disagreement*, and assertions that provoke reactions of *non-understanding*, or *linguistic disagreement*. Following Boghossian and Wolfgang Künne, Glock characterizes analytic assertions by saying that in their case 'the mere grasping' of their meaning 'suffices for being justified in accepting' them (p.147). Then he argues in favour of the following two theses: (1) Analytic propositions such as 'All vixens are female' 'do not describe a special kind of reality (whether it be abstract entities beyond space and time or the most abstract or general features of physical reality)'; (2) rather, 'their special (necessary, a priori) status has to be explained by reference to *language*, and, more specifically, by reference to the meaning of expressions and hence to the way they are used' (p.143).

For Glock, this conception far 'from being grotesque' has a 'respectable philosophical pedigree and chimes with commonsense, as Quine came to realize' (p.143). Glock tries to protect this thesis from the 'powerful objections' advanced against the original version of the linguistic doctrine 'by reconciling Wittgenstein's claim that analytic statements 'have a normative role with Carnap's concession that they are true' (p.143): 'Analytic propositions can be said to be true, but their truth consists in their having a normative status within a certain linguistic practice' (p.144). An interesting aspect of Glock's proposal is that while the truth is 'a feature of what is expressed by sentences', maybe analyticity 'is best regarded as a feature of sentences: it indicates that they have a special, normative, function. And this role is obviously something that sentences can lose, subject to the vagaries of our linguistic practice. The price to be paid for this manoeuvre is the acknowledgement that talk of analytic *propositions* and analytic *truths* is strictly speaking elliptical. *Au fond* it is sentences that are analytic, namely if they are used to express a rule that is constitutive of the meaning of a word' (p.168).

Peter Pagin ('Quine and the Problem of Synonymy', pp.171–97) takes 'Two

Dogmas' as his starting-point in order to discuss not the notion of analyticity but one closely linked to it: synonymy. His poignant considerations mainly aim at underlining the difficulties that prevent us from satisfactorily solving the problem.

Tyler Burge's essay ('Logic and Analyticity', pp.199–249) is the longest in this volume; in some ways it can stand on its own and would be worthy of separate treatment. It comes with three appendices, two of which are of a historical nature. In the first one, he sketches the key intuitive notions of logical validity and logical consequence in the history of logic with particular reference to Aristotle, Abelard, Duns Scotus, Buridan, Leibniz, Bolzano and Tarski. The second one shows the dependence of logic on mathematics in Poincaré's philosophy. For Burge, 'Poincaré's insight is that a systematic reflective understanding of logic must invoke mathematics' (p.246), and this understanding 'is synthetic, not analytic' (p.246). The reference to Poincaré is connected to the main theoretical thesis that Burge supports by taking again into consideration the arguments developed by Quine, not only in 'Two Dogmas' but also, and mainly, in 'Truth by Convention' (1935), 'Carnap and Logical Truth' (1954) and *Philosophy of Logic* (1970) against the existence of assertions that, like logical truths, are analytical in the sense that are true in a vacuous way, in other words independently of a subject-matter.

For Burge, 'full reflective understanding of logic and deductive reasoning' reveals some a priori relations and 'requires substantial commitment to mathematical entities' (p.199). Such relations 'emerged only slowly in the history of logic', but 'they can be recognized retrospectively as implicit in logic and deductive reasoning'. This leads to an image of logic different from traditional conceptions. For Kant, both logic and mathematics are a priori; logic is analytic, since its truths are contentually empty, whereas mathematics should be considered as synthetic similarly to sciences (sciences which in their turn have an a priori and an empirical component). For Carnap, like Kant, both mathematics and logic are a priori; differently from Kant, though, Carnap thinks that they are both analytic in the sense that they are empirically and factually vacuous: only sciences have an empirical value and are thus synthetic. For Quine, differently from both Kant and Carnap, there are no vacuously analytic sentences and all knowledge is a posteriori. Burge proposes a different interpretation altogether. He thinks that Quine was right in negating the existence of vacuously analytic statements; he also thinks, though, that Kant and Carnap were right when arguing for the existence of a priori statements. His idea is that there is a synthetic a priori knowledge – in the sense of 'synthetic' that contrasts with the vacuousness concept – and that such synthetic a priori knowledge is represented at best by both logic and mathematics.

Differently from Kant, Burge denies not only the analyticity of logic but also the confinement of synthetic knowledge to the world of appearances. Regarding this problem, Burge is prepared to acknowledge that how 'to bridge the feared gap between thought and subject matter without causal-experiential relations still needs explanation' (p.240), but thinks that he has given an at least partial answer to Kant's question: How is a priori knowledge of a subject-matter possible? He thinks in fact that he managed to show that the possibility of synthetic a priori knowledge of mathematics 'is implicit in conditions on the possibility of relatively elementary propositional thinking. Such knowledge is necessary to explaining conditions on the

possibility of such thinking' (p.239). Burge's discourse, accordingly, is 'parallel to the aspect of Kant's answer that claims' that synthetic a priori cognition 'is possible because it is necessary to the possibility of explaining and justifying sense experience' (p.239).

3. The third and last section, entitled *'Two Dogmas' and Beyond*, includes two papers that see 'Two Dogmas' 'in the perspective of Quine's overall philosophy' (p.4).

The first one is by Geert Keil, "Science itself Teaches'. A Fresh Look at Quine's Naturalistic Metaphilosophy' (pp.253–80). It is well known that, for Quine, the refusal of the analytic/synthetic distinction is connected to the thesis that there is no clean-cut difference between philosophy and natural science, a thesis that, starting from the late 1960s, Quine began to introduce as a form of 'naturalism'. Keil's paper deals with the question 'of what exactly Quine's claim means that philosophy is continuous with natural science' (p.254). Following Jonathan Cohen's (1987) suggestion in 'The Importance of Quine', Keil tries to sort out Quine's 'scientific avowals from his philosophy at work' (p.254), in other words (quoting Cohen, 1987) 'to investigate closely the extent to which Quine's ideas about the method of his philosophical enterprise are coherent with the substance of his philosophical doctrine'. Aiming at this, Keil takes up one of Quine's preferred phrases (found in the paper's title, 'Science itself teaches that . . .') and follows its development in Quine's works.

For Keil, Quine, differently from Wittgenstein, does not specify what distinguishes philosophical and scientific investigations and the analysis of his metaphilosophy shows that naturalism and the use of naturalistic language are some kind of a 'rhetoric' that has very little influence 'on the way he actually does philosophy' (p.253). Keil's clear-cut conclusion is that there is a 'real' (p.278), 'unresolved' (p.270) tension between Quine's empiricist definition of science as a game whose aim is the 'prediction of observations' (p.268) and 'the non-empirical nature of mathematics, logic, and major parts of philosophy. These parts of the scientific enterprise enable us to knit our web of belief more closely without contributing additional empirical check-points' (p.278).

The last essay of the volume is Donald Davidson's 'Quine's Externalism' (pp.281–97). Here Davidson (to whose memory the volume is dedicated) credits 'Quine with having implicitly held a view' that Davidson himself 'had long urged on him: externalism' (p.281). Quine had the merit of defending a behaviourist approach to language that explains the meaning of verbal utterances on the grounds of observed usage. For Davidson, such an approach as well as destroying the myth of meaning – as Quine has always stated, theorizing the possibility of the indeterminacy of translation – entails also a powerful form of externalism. In Quine, though, this externalism finds 'a counter-current' in the idea of stimulus meaning and in his reluctance to take the final step from the proximal to the distal stimulus as the relevant cause of a mental state.

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On the whole the volume maintains the promises made by the editors in their introduction. All the essays fully show the importance and wide ramification of the problems raised by Quine in his seminal 1951/53 paper and both the works that

preceded (in particular, 'Truth by Convention') and followed it (in particular, 'Carnap and Logical Truth' and *Word and Object*). As I elaborate later, the only area left untouched is the one of philosophy of science.

First of all, the essays confirm the editors' idea that the reasons 'for a philosophical retrospective of 50 years of "Two Dogmas"' and its wide repercussions are not 'purely or even predominantly historical'. As a matter of fact there are three reasons, of a strongly theoretical nature, and all three can be found in all of these essays. The first one is that on closer scrutiny the apparently broad consensus on what 'Two Dogmas' has demonstrated 'proves to be deceptive' (p.2). For the editors, Quine's aims are not yet clear, and it is not clear either how the rejection of the analytic/synthetic distinction relates to Quine's thesis of the indeterminacy of translation and his general semantic holism. Personally, I think that this is also true for Quine's criticism of logical conventionalism elaborated in 'Truth by Convention' (1935).

Secondly, since the days of Grice and Strawson's (1956) article 'In Defense of a Dogma', various attempts have been made to disentangle the criticism directed at the 'dogma' of reductionism from the criticism directed at analyticity, and rehabilitate distinctions such as synthetic/analytic, a priori/a posteriori and contingent/necessary by reverting, in order to clarify their nature, to tools different from the ones criticized by Quine. For example, since the 1950s and 1960s, David Hamlyn (1961: 359–67; 1966: 514–25) has tried to clarify and defend the notion of analyticity using Wittgenstein's theories on meaning. Along with Wittgenstein's followers, other philosophers too contested the cogency of Quine's original arguments or suggested ways of tracing the distinctions attacked by Quine in a way that made them immune from his criticisms. As for their names, I would mention not only Hilary Putnam (to whom the volume gives a particular relevance), but also, for example, Arthur Pap, Jaakko Hintikka and Laurence Bonjour. The wide variety of theoretical stances attested by this volume can only confirm how Quine's negation of analyticity and a priori cannot be considered – differently from what some people think – the last word on the subject.

As far as this aspect of the problem is concerned, I will add that these papers prove not only the existence of a wide disagreement about Quine's theses, but something more. In effect, they prove that both rejections and acceptances of the distinctions between the analytic and the synthetic, the a priori and the a posteriori, have been and are an integral part of alternative philosophical projects of a global nature, and that for this reason it is extremely difficult to evaluate both rejections and acceptances outside the wider theoretical context into which they are inserted. For example, from Mayer's paper there clearly emerges the link between Kant's conception of analyticity and the a priori and his transcendental idealism. Some recent papers have shown how the disagreement between Quine and Carnap on analyticity should be seen as a contrast between two extremely different epistemological projects. Such projects, in fact, share the intent to eliminate the reference to intuition from epistemic justification, but Quine's argument mainly centres on a holistic evaluation of the way in which our beliefs change, whereas Carnap's aims at understanding not so much the dynamics of knowledge but the logical structure of epistemic justification.

Thirdly, this volume confirms the important stimulus given to the debate by S. Kripke's conception that 'resuscitates the traditional idea of *de re* necessities and thereby challenges both the Kantian analytic/synthetic distinction and its empiricist debunking' (p.2). Kripke has in fact advanced the thesis that 'some necessary truths, truths about the essence of things, are discovered a posteriori by empirical science' (p.2). In this way his 'essentialism has forcefully revived the view', rejected not only by Quine (as the editors remind us), but also in the Machian anti-absolutism of logical empiricists, 'that necessity is an intrinsic and perhaps *sui generis* feature of reality, rather than a product of our thought and language' (p.3).

From this point of view, Burge's essay seems to me of pivotal importance. If we look at Quine's work we can see that he draws contrasting consequences from his refusal of analyticity and the linguistic doctrine of the a priori. At the beginning of 'Two Dogmas' he says that such refusal brought with it a blurring of the science/metaphysics distinction and a coming closer to pragmatism; in the later writings, though he ends up underlining mainly the realism involved by such blurring, stating – against the antimetaphysical Carnap – that the elaboration of an efficient canonical notation must not be distinguished from the 'limning of the most general tracts of reality' (see, in particular, Quine, 1960: §35, p.161). It is also true, though, that Quine never developed his approach to realism and metaphysics to the point of accepting the adoption of the modalities *de re* and the essentialism that such acceptance involves. Moreover, he always stated that his 'Empiricism without Dogmas' had to be seen as a form of empiricism, not weaker but more radical than the one supported by logical empiricists in which a certain dose of apriorism was still implicit. In order to understand the historical-philosophical climate that followed 'Two Dogmas', it is interesting that Burge, now, puts aside all of Quine's pragmatic, empiricistic and anti-essentialistic components and explains the importance of his criticism to analyticity since this has helped analytical philosophy to free itself from the 'prohibitions' of neo-empiricistic origin: 'Quine's arguments, albeit primarily ones outside the famous paper', Burge writes at the beginning of his essay, 'subverted the notion of analyticity that had buttressed the positivist view of mathematical logic. This notion had functioned to close off mathematics and logic from philosophical reflection, and to sever a main route to rationalism and metaphysics. Quine reopened the route, but declined to develop it. The route invites development – especially its epistemic branch' (p.199). Personally I still prefer an empiricist attitude to a rationalistic and metaphysical one. On the historical level, though, Burge's description seems to be substantially correct.

With Burge's reference to the epistemic branch I will pass on to another relevant aspect of the volume and also to what I deem an omission. The essays collected here show very clearly the weight of the epistemological dimension of the problem of analyticity and the a priori along with the weight of the ontological and metaphysical dimension. Almost all the defenders of the analytic/synthetic and the a priori/a posteriori distinctions declare, in one way or the other, the importance of looking at such dichotomies from the point of view of epistemic justification. This idea is in line with what has been stated by other scholars as well, whose views though not represented in this volume have equally insisted on the epistemic aspect, not so much

from the point of view of general epistemology but from the point of view of the philosophy of science.

In the 1950s and 1960s, an important position in the discussion on analyticity, a priori and necessity was held by the following question: do we have to attribute a role to these notions within the standard conception of scientific theories and the description of the scientific method? It was on this very question that Carnap parted company not only with Quine, but also with Hempel. This aspect of the problem was significantly present also in the recent philosophy of science where it appeared again not only in connection with the historical revision regarding the meaning of the neo-empiricist criticism of Kant's theory of synthetic a priori judgements and with regard to the relationship between logical empiricism and the new philosophy of science. Think of Kuhn's thesis, according to which 'normal science' includes as its integral parts some 'paradigmatic propositions' characterized by the fact of being neither analytic nor empirical in the usual sense. They are rather propositions that despite not being eternal truths play a constitutive role in the structure of scientific thought.

Such an idea has behind it a complex story regarding not only the new philosophy of science and the logical empiricists' criticisms directed at Kant's synthetic a priori, but also Poincaré's conventionalism, Carnap's conception of the theory/experience relationship starting from *Die logische Syntax der Sprache*, the 1960s and 1970s discussions on geocronometric conventionalism and the logical structure of empirical control (an important aspect of the epistemic justification of our beliefs), and finally the adoption, in various sectors of contemporary epistemology, of the theories of the so-called *contextual*, *relativized* and *functional* a priori. Similar conceptions generally accept a more or less strong version of the thesis of the holistic dependence of the network of our beliefs, but state at the same time that within the network we cannot assign to all assertions the same role or function when evaluating the way in which empirical evidence relates itself to this or that specific belief. Some beliefs, hypotheses or assertions – but not others – have a presuppositional role, contextually or relatively a priori. We can find no traces of this debate in this volume. On p.151 Glock quotes as 'still unsurpassed' Arthur Pap's *Semantics and Necessary Truth* (1958); nowhere, though, can we find mention of the fact that, for example, Pap also wrote *The A Priori in Physical Theory* (1946; and reissued in 1968) today seen by some scholars as an interesting step towards a functional theory of the a priori.

Apart from this omission, the volume seems to me a significant contribution to the discussion on analyticity and a priori; among the numerous merits already mentioned, I wish to add another. As I said, the editors insist (rightly) on the theoretical rather than the historical aspect of the debate started by 'Two Dogmas' over the last 50 years; nevertheless, some of the essays contain very interesting historical observations. So, the volume has the additional merit of showing how productive the interplay between historical and theoretical research can be when they are both carried out in full accord with their respective methodological principles and do not impinge on each other.

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Note

1. The book under discussion is *Fifty Years of Quine's 'Two Dogmas'*, edited by H.-J. Glock, K. Glüer and G. Keil, and published in 2003 by Editions Rodopi BV of Amsterdam/New York (ISBN 90-420-0948-9).

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